

NEON MUSEUM AND BONEYARD

PHASE 01

LAS VEGAS, NEVADA

GENERAL NOTES

1. Codes: all materials & work shall conform to the requirements of the 2006 International Building Code, Chapter 34 – Existing Buildings, Historic Structures, and all other local, state and federal regulations.
2. Standards: a.s.t.m. designations and all standards refer to the latest editions.
3. Site limitations: the work, as shown on this set of drawings, but not necessarily limited to the work as drawn, includes examining the site and all conditions and limitations thereon. Take note of all such conditions and limitations, whether or not the same are specifically shown or mentioned as to be part of this work, and attain the completed conditions as indicated by the drawings.
4. Existing conditions: all information shown on the drawings relative to existing conditions is given as the best present knowledge, but without guarantee of accuracy. Where actual conditions conflict with the drawings, they shall be reported to the engineer so that proper revisions may be made. Modifications of details of construction shall not be made without prior written approval of the engineer.
5. Dimensions: dimensions indicated are the approximate dimensions to be used for bid purposes. Working dimensions shall not be scaled from the plans, sections, details, or any other drawings of the drawings. Dimensions should be taken as noted on the plans.
6. Verification: verify all dimensions, elevations & site conditions before starting work. Notify the engineer immediately of any discrepancies.
7. Similar work: all details as shown on the drawings shall apply to all similar conditions whether referenced or not. Typical details and notes shall apply unless shown otherwise on the plans.
8. Conflicts: notes & details on the drawings take precedence over the general notes & typical details in case of conflict. Omissions or conflict between the various elements of the working drawings and/or specification shall be brought to the attention of the engineer prior to proceeding with any work involved.
9. Problems: should, through the progress of work, a problem develop, either due to site conditions or drawing error, the engineer is to be notified immediately before any continuance of the work so the problem may be resolved according to design.
10. Changes to drawings: obtain prior written approval.
11. Construction methods and project safety: the contract drawings & specifications represent the finished structure and do not indicate methods, procedures or sequence of construction. Take necessary precautions to maintain and insure the integrity of the structure during construction. Neither the owner nor architect/engineer will enforce safety measures or regulations. Contractor shall design, construct and maintain all safety devices, shoring, bracing and bracing. The contractor shall supervise and direct the work and shall be solely responsible for construction means, methods, techniques, sequences and procedures.
12. Temporary supports: contractor shall provide and install adequate temporary supports and erection bracing to safely execute all work and shall be fully responsible for the same.
13. Excavations: locate and protect underground structures, conduits, plumbing or other utilities where new work is being performed.
14. Coordination: the contractor shall be responsible for coordinating the work of all trades & shall check all dimensions. Any discrepancies shall be called to the attention of the engineer and be resolved before proceeding with the work.
15. Permits: it shall be the responsibility of the contractor to obtain necessary permits.

17. Shop drawings: as a convenience to the contractor and the subcontractors, the engineer will review required shop drawings as to their general conformance to the design concept. The contractor and subcontractors shall retain and approve all shop drawings prior to submitting them to the engineer. Failure to do so shall cause the drawings to be returned to the contractor and subcontractors un-approved, and the engineer shall not be held liable nor responsible for any delays caused by this, the contractor and subcontractors shall submit shop drawings and compliance documents to the building department or other city agencies when required.
18. Unforeseen conditions: include as part of this work miscellaneous cutting and patching necessitated as a result of unforeseen conditions and/or the need to cut existing surfaces as required to make the new work join and amitch existing surfaces to remain, both on the site and on adjacent property.
19. Pipes, ducts, sleeves, chases, etc.: shall not be placed in slabs, beams, or walls unless specifically shown or noted, nor shall any structural member be cut for pipes, ducts, etc., unless specifically shown. Obtain prior written approval for installation of any additional pipes, ducts, etc.
20. Construction loads: materials shall be evenly distributed if placed on framed floors or roofs. Do not exceed the allowable loading for the supporting members and their connections.

FOUNDATIONS

1. Founding of Footings and Slabs: On firm undisturbed natural soils.
2. Soil Pressures: Based on report by Owens Geotechnical, Inc. Report E-07-082, May 15, 2007. Allowable soil bearing pressure: 2000 psf
3. All fill and backfill shall be approved material.
4. Water shall be removed from foundation excavations prior to placing of concrete. Core shall be taken to not dry out underlying natural soils.
5. Do not over-excavate foundations at lower elevations. Prevent disturbing soils around footings.
6. Contractor is responsible for all shoring, bracing, etc. necessary to support, cut or fill banks during excavating, forming and placement of concrete.
7. Soils report shall be kept on the job site at all times.

CONCRETE

1. Minimum ultimate compressive strength of concrete, F_c , shall be as follows at 28 days, U.N.O.
 - a) Footings, walls and cap 4,000 psi U.N.O.Continuous inspection by a special inspector is required for concrete with F_c over 2,500 psi.
2. All concrete shall be regular weight hard rock type concrete unless noted otherwise. Aggregates shall conform to A.S.T.M. C-33.
3. Cement shall conform to A.S.T.M. C-150 (Type II) unless alkaline soils are present.
4. Concrete shall be maintained in a moist condition for a minimum of five days after placement. Alternate methods of curing may be accepted with prior Engineer's approval required.
5. Concrete slump shall not exceed 5 inches.
6. Concrete shall not free fall more than 6 feet. Use tremie or pump.
7. Prior to placing concrete, reinforcing steel and embedded items shall be in place and well secured in position.
8. All anchor bolts and Holdowns shall be tied in place prior to foundation inspection.

REINFORCING STEEL

1. Reinforcing steel shall be deformed steel conforming to the requirements of A.S.T.M. A-615 (deformations shall be in accordance with A.S.T.M. A-305) as follows:
 - a) Grade 40 for #5 and smaller
 - b) Grade 60 for larger bars
2. Welded reinforcement shall conform to A.S.T.M. A706.
3. Detailing, fabrication and erection of reinforcing bars shall conform to A.C.I. Manual of Standard Practice for Detailing Reinforced Concrete Structures, the most recent edition.
4. Concrete protection for reinforcement shall be at least equal to the diameter of the bars.
 - a) Minimum cover for cast in place concrete shall be 1 1/2 inches. For concrete cast against earth, the minimum cover shall be 3 inches.
5. Bars shall be clean of rust, grease or other material likely to impair bond. Bends shall be made cold.
6. Lap reinforcement in masonry 40 bar diameters minimum and 50 bar diameters minimum in concrete lap 50 vertical bars at corners and intersections.
6. Reinforcing steel couplers shall be Erico, Inc., ECR-5967. Install connectors to match existing bar sizes per manufacturer's instructions. A special inspector shall observe the work in accordance with the product approval report.

STRUCTURAL & MISC. STEEL

1. All structural and miscellaneous steel shall be fabricated and erected in accordance with the A.I.S.C. specifications for the design, fabrication, and erection of structural steel for buildings, latest edition.
2. Channels, angles and misc. steel shall conform to A.S.T.M. A-36, unless noted otherwise.
3. All bolts shall conform to A.S.T.M. A-307, unless noted otherwise.
4. All welding is to comply with A.W.S. standards and is to be done by welders certified for the type of welding to be performed as required by the Building Department.
5. All welding is to be done by electric arc process with E70XX electrodes, E70-T4 electrode is not allowed.
6. All welding shall be done in a shop of a licensed fabricator of with continuous inspection by a registered building inspector.
7. A certificate of fabrication from the shop performing the welding or a report from the special inspector must be furnished to the job inspector prior to framing approval.
8. All fabrication shall be done in the shop of a licensed fabricator.

I. PROJECT SCOPE AND INTENT

The intent of this project is to re-erect the reinforced concrete thin shell structure at its new location. Work includes new foundations and walls, chipping along cut lines to expose reinforcing steel and installing couplers and casting new concrete to finish the reconstructed roof structure.

Conceptual Sequence of Installation

1. Construct new foundations
2. Construct masonry back wall
3. Install shoring to support the roof sections
4. Lift and place sections
5. Prepare ledges for reinforcing coupling
6. Splice reinforcing steel per detail
7. Form concrete back wall, beams and cap
8. Place new reinforcing steel as shown
9. Form closure strips between sections
10. Pour cap section and beams on masonry wall
11. Construct back concrete shear wall
12. Brace shear wall until rear building and roof are constructed.

SCOPE OF WORK

THE FOLLOWING IS A CONCEPTUAL SEQUENCE OF WORK. CONTRACTOR MAY CHANGE OR ALTER THE SEQUENCE AS DESIRED SUBJECT TO THE APPROVAL OF THE ENGINEER.

1. CONSTRUCT FOUNDATIONS
2. CONSTRUCT MASONRY BACK WALL
3. CONSTRUCT SHORING TO SUPPORT CONCRETE SECTIONS
4. LIFT AND PLACE SECTIONS. USE ADDITIONAL SHORING AS NECESSARY
5. PREPARE EDGES FOR JOINING AS SHOWN
6. SPLICE REINFORCING STEEL AS SHOWN.
7. PLACE NEW REINFORCING STEEL IN CAP SECTION PER PLANS
8. FORM CLOSURE STRIPS BETWEEN SECTIONS.
9. CONSTRUCT NEW CMU WALL UNDER CONCRETE ON GRID 3 PER PLAN.
10. CONSTRUCT BACK SHEAR WALL. BRACE AS REQUIRED.

PRODUCTS

REINFORCING STEEL SPLICES
REINFORCING STEEL
CONCRETE
CURING COMPOUNDS

REPAIRS TO CONCRETE

CONCRETE CRACK REPAIR
CONCRETE REPAIRS
CONCRETE FINISHING

ABBREVIATIONS

L	AND	HR.	HOOR	W.	WEST
∠	ANGLE	HORIZ.	HORIZONTAL	W/	WITH
@	AT	HT.	HEIGHT	W.C.	WATER CLOSET
ø	DIAMETER OR ROUND	I.D.	INSIDE DIAMETER	WD.	WOOD
(E)	EXISTING	IN.	INCH	WIN.	WINDOW
(N)	NEW	INSUL.	INSULATION	W/O	WITHOUT
☐	CENTERLINE	INT.	INTERIOR	WP.	WATERPROOF
#	POUND OR NUMBER	JT.	JOINT	W.S.	WOOD SCREW
PL	PLATE	LAM.	LAMINATE	WSOT.	WAINSCOT
ACOUS.	ACOUSTICAL	LAV.	LAVATORY	WT.	WEIGHT
A.B.	ANCHOR BOLT	LLH.	LONG LEG HORIZONTAL	W.W.F.	WELDED WIRE FABRIC
ADD.	ADDITIONAL	LLV.	LONG LEG VERTICAL		
ADJ.	ADJUSTABLE	LT.	LIGHT		
AGGR.	AGGREGATE	MAX.	MAXIMUM		
AL.	ALUMINUM	M.B.	MACHINE BOLT		
ALT.	ALTERNATE	MECH.	MECHANICAL		
APPROX.	APPROXIMATE	MEMB.	MEMBRANE		
ARCH.	ARCHITECTURE	MEZZ.	MEZZANINE		
ASPH.	ASPHALT	MFG.	MANUFACTURER		
BD.	BOARD	MIN.	MINIMUM		
BLDG.	BUILDING	MISC.	MISCELLANEOUS		
BLKG.	BLOCKING	M.O.	MASONRY OPENING		
BM.	BEAM	N.	NORTH		
B.N.	BOUNDARY NAILING	N.G.	NON GRADE		
BOIT.	BOTTOM	N.I.C.	NOT IN CONTRACT		
B.W.	BOTH WAYS	NO.	NUMBER		
C	CAMBER	NOM.	NOMINAL		
C.J.	CEILING JOISTS	N.T.S.	NOT TO SCALE		
CLG.	CEILING	O.C.	ON CENTER		
CLR.	CLEAR	O.D.	OUTSIDE DIAMETER (DIM.)		
COL.	COLUMN	OPNG.	OPENING		
CONC.	CONCRETE	OPP.	OPPOSITE		
CONN.	CONNECTION	PAR.	PARALLEL		
CONSTR.	CONSTRUCTION	P.C.	PIECE		
CONT.	CONTINUOUS	P.C.	PIPE COLUMN (STEEL)		
CTR.	CENTER	PERP.	PERPENDICULAR		
d	PENNY (NAIL SIZE)	PL.	PLATE		
DBL.	DOUBLE	PLAS.	PLASTER		
DEPT.	DEPARTMENT	PLYWD.	PLYWOOD		
DET.	DETAIL	PR.	PAIR		
DIA.	DIAMETER	P.S.F.	POUNDS PER SQUARE FEET		
DIAG.	DIAGONAL	P.S.I.	POUNDS PER SQUARE INCH		
DIM.	DIMENSION	P.T.	PRESSURE TREATED		
DN.	DOWN	RAD.	RADIUS		
DO.	DITTO	R.D.	ROOF DRAIN		
DR.	DOOR	REF.	REFERENCE		
D.S.	DOWNSPOUT	REINF.	REINFORCED/REINFORCING		
DWG.	DRAWING	REQ.	REQUIRED		
(E)	EXISTING	RM.	ROOM		
E.	EAST	R.O.	ROUGH OPENING		
EA.	EACH	R.R.	ROOF RAFTER		
E.F.	EACH FACE	RWD.	REDWOOD		
EL.	ELEVATION	S.	SOUTH		
ELEV.	ELEVATOR	S.C.	SOLID CORE		
EN.	EDGE NAILING	SCH.	SCHEDULE		
EQ.	EQUAL	SECT.	SECTION		
EXP.	EXPANSION	SH.	SHEET		
EXT.	EXTERIOR	SHTG.	SHEATHING		
E.W.	EACH WAY	SM.	SIMILAR		
F.B.	FLAT BAR	SPEC.	SPECIFICATION		
FDN.	FOUNDATION	SQ.	SQUARE		
F.F.	FINISH FLOOR	STAGG.	STAGGERED		
F.J.	FLOOR JOIST	STD.	STANDARD		
FIN.	FINISH	STL.	STEEL		
FLR.	FLOOR	STOR.	STORAGE		
FLASH.	FLASHING	STR.	STRAIGHT		
F.N.	FIELD NAILING	STR.	STRUCTURAL		
F.O.C.	FACE OF CONCRETE	SUSP.	SUSPENDED		
F.O.F.	FACE OF FINISH	SYM.	SYMMETRICAL		
F.O.S.	FACE OF STUD	T&G	TONGUE AND GROOVE		
F.P.	FULL PENETRATION	THK.	THICK		
FT.	FOOT OR FEET	T.O.S.	TOP OF STEEL		
FTC.	FOOTING	T.P.	TOP OF PAVEMENT		
FURR.	FURRING	T.S.	TUBE SHAPE (STEEL)		
FUT.	FUTURE	T.W.	TOP OF WALL		
GA.	GAUGE	TYP.	TYPICAL		
GALV.	GALVANIZED	UNF.	UNFINISHED		
GRD.	GRADE	UN.O.	UNLESS NOTED OTHERWISE		
GYP.	GYPSUM	URM.	UNREINFORCED MASONRY		
H.C.	HOLLOW CORE	VERT.	VERTICAL		
HDWD.	HARDWOOD	V.I.F.	VERIFY IN FIELD		

PLAN REVIEW CHANGES AND CLARIFICATIONS

1. The following drawings have been revised:
S0.1
S2.2
S3.2
S5.1
S7.1
2. Changes to details include revised connections from the new concrete and CMU walls to the roof structure.
3. Other changes coordinate the chipping back of the concrete roof to connect to the cap section.
4. Deferred submittal is the bracing of the concrete wall in the rear addition.

DRAWING INDEX

S0.1	TITLE SHEET
S2.1	FOUNDATION PLAN
S2.2	ROOF PLAN
S3.1	BUILDING SECTIONS
S3.2	WALL ELEVATIONS
S4.1	TYPICAL DETAILS
S5.1	SECTIONS AND DETAILS
S7.1	SECTIONS AND DETAILS

In lieu of Structural plan review
Plans and calculations will be deemed
acceptable if created by a Nevada
Licensed civil or structural engineer

